Maine Safe Ways to School 2001-2003

Executive Summary

Fewer students than in the past walk and bike to school today. What is causing this trend? What does it mean to the health of our children, and what state and local policy or infrastructure changes can be made to reverse this trend?

A walking school bus to the Lincoln School in Augusta organized as part of the Maine Safe Ways to School research project.

Summary:

During 2001-2003, the Maine Department of Transportation (MaineDOT) coordinated a federally funded, collaborative, research project to determine existing rates of bicycling and walking to school in the state. This project, entitled **Maine Safe Ways to School**, was undertaken with the expectation that the information learned through this pilot project would be useful in developing state and local policies and practices which would promote bicycling and walking to schools statewide.

MaineDOT has an ongoing interest in understanding the reasons why more students are not biking and walking to school, and under what conditions they might change their habits. Current national and state trends of increased obesity and decreased physical activity are inversely related to declining rates of bicycling and walking. From a transportation and public health perspective, MaineDOT and partner agencies share a common concern for identifying the infrastructure, policy and programmatic causes of these conditions, and providing guidance and technical assistance to reverse these trends.

This study used national models tailored to fit Maine. Participants included school administrators, parents, students, planners, and elected officials.

Four representative schools/school districts comprising over 5,500 students from elementary through high school were selected for the study.

- Lincoln School in Augusta (urban elementary school)
- Westbrook School district (six schools in urban/suburban Portland)
- Maine School Administrative District 40 (eight schools in rural Mid-coast)
- Peru (rural elementary school)

A Fall 2001, in-class baseline count of mode of access to school was followed by take-home surveys which were analyzed by the University of Maine Center for Research and Evaluation. Analyses were standardized based upon distance from home to school and grade level. The results of the surveys showed some surprising findings and pointed to the importance of a comprehensive approach to school siting, infrastructure and safety.

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Generalized Findings:

Age Matters

The age of the child is a factor that determines the likelihood of walking and biking and influences the improvements required.

►*K-2*

75 percent of study parents of K-2 children who lived within 1 mile of school will not allow them to walk to school because they felt they were too young. The percentage drops to 23 percent for grades 3-8 children. Parental supervision is necessary for this age group. Walking school bus programs where groups of children are led by competent adults were tried in Augusta and Warren and have worked well.

►*Elementary and Middle School*

As children become more able to navigate for themselves, infrastructure and safety improvements, as well as reduced traffic speed, are needed to increase biking and walking to school. Children, like all people, need to feel safe. This often means traffic calming strategies in school neighborhoods as well as crossing guards and adult supervision.

►*High School*

Walking and biking need to be de-stigmatized. We need to make it fun (and liberating) to walk and bike to school.

In all cases, students and parents need encouragement to bicycle and walk to school.

Municipalities and school districts need to make facilitating walking and biking part of their mission. This must be integrated into community goals of public health and safety. Carpooling and use of public buses can also contribute to a community atmosphere which reinforces walking and biking.

Location Matters

Overall, 85 percent of parents will not allow their children in grades K-8 to walk or bike to school, yet 24 percent of them lived within one mile of school. Rural students are less likely to walk or bike to school except in rural village settings.

Children shouldn't have to run across the road because cars won't slow down.

The highest rates of walking/biking occurred at urban schools located in traditional neighborhoods. The surveys revealed that the locations of the schools in Union and Warren were primary deterrents to walking and bicycling to school. Locating the schools in Union, over one mile from the village center on a busy, high-speed arterial, effectively eliminated walking and bicycling to this school. Locating the new elementary school in Warren across Rt. 90 from the former location that was in the primary village area, significantly reduced the number of children bicycling and walking to school. In contrast, Westbrook's decision to locate some of its schools on dead-end streets in quiet neighborhoods makes walking and bicycling more feasible.

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The State Board of Education should highlight positive examples of site selection and renovation proposals and offer technical assistance in a best-practice methodology. A cooperative effort among state agencies and public health officials to quantify some of the fiscal and non-fiscal long-term costs and benefits of site selection alternatives would be a beneficial tool for local decision makers.

Traffic Matters

The most frequent concerns cited by parents include safety in traffic, insufficient sidewalks, and vehicle speed. Traffic calming strategies in school locations are critical. In many cases, school location decisions necessitate retrofitting infrastructure, including roadways, to improve safety and make walking or biking a safe option.

Our road system has left many students and parents 'locked-out' of safe opportunities to walk or bike to school. In many cases, improvements can be made to the roads or adjacent paths constructed to reclaim the option of a non-motorized trip to school.

Typical Report Table – Survey Results

Most Frequently Reported Conditions Under Which Parents Would Allow Grade 3-8 Students to Walk or Bike to School		
	Urban	**Rural**
Sidewalks were improved or constructed	17%	52%
Cars slowed down	24%	48%
Bicycle/walking paths were separated from traffic	19%	43%
Accompanied by other parents	19%	34%
Sufficient number of crossing guards	18%	34%

Increasing Bicycling and Walking to School

Achieving an increase in the number and frequency of Maine children who walk to school requires efforts in each of the following four categories:

Engineering - physical infrastructure improvements such as paved road shoulders, sidewalks, crosswalks and pedestrian signals, shared use paths, and design issues within the school campus;

Education - educating motorists to be more aware of bicyclists and pedestrians as well as teaching children the age-appropriate skills regarding walking and bicycling safety;

Encouragement - creating incentives for children to walk or bike-to school by holding special walking or bicycling days with prizes; "walking school buses" or "bike trains" where one or more parents or other adults organize a group walking or biking from a specific neighborhood along a route to and from school.

Enforcement - includes strict enforcement of speed limits and crosswalk laws in school zones as well as providing crossing guards where needed.

Recommendations

Each of the particular stakeholders can play a key role in increasing bicycling and walking to school.

Municipalities can pave shoulders, build paths, maintain and construct sidewalks, form bicycle/pedestrian committees, and enforce speed limits and crosswalk laws.

School districts can build school campuses with safe walking paths and attractive, functional bike storage. They can also separate bicyclists and walkers from school bus and automobile drop-off areas and

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examine school bus policies to encourage walking from short distances.

State Agencies can work together on school siting issues, encouragement programs, and a Safe Routes to School program to fund local infrastructure improvements and encouragement programs.

The ***general public*** can hold public agencies accountable to provide safe bicycling and walking facilities to school wherever possible and to support speed reduction efforts near school locations.

Final Report:

An end result of the project was a Final Report issued in Spring 2003. The report includes a full summary of the project process, survey analyses, recommendations and implementation measures including: infrastructure improvements, promotional events, and policy and practice changes at the local and state level.

Ongoing Efforts

MaineDOT and the partner agencies involved in this study are committed to continuing efforts to improve conditions for bicycling and walking to school.

The study's hand count survey provided a benchmark to measure future success. Schools which begin programs to encourage bicycling and walking, and communities which work to improve the conditions for these activities, can measure their success by repeating the hand counts.

The engineering examples and design work can be used as a starting point for identifying problem spots in communities which are barriers to biking and walking. MaineDOT plans to launch a Maine Safe Routes to School Program in 2003 to provide funding to local communities for these infrastructure improvements.

Encouragement programs, such as walking school bus and "Walk to School" Days, will continue by the Bicycle Coalition of Maine.

Children need a safe place to walk.

Websites

The project report is available at:

http://www.maine.gov/mdot/opt/bike/

Websites on safe ways to school and bicycle and pedestrian planning, design and advocacy:

www.saferoutestoschools.org

www.altaplanning.com

www.bikemaine.org

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